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05 Signature:

(Melody Almbero)

Docket No.: 291958157US4 Client Ref No. P01-0030US2

(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Wilson et al.

Application No.: 10/817,659

Filed: April 2, 2004 Art Unit: 1742

For: TUNING ELECTRODES USED IN A

REACTOR FOR ELECTROCHEMICALLY PROCESSING A MICROELECTRONIC

WORKPIECE

Examiner: Not Yet Assigned

Confirmation No.: 3413

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT (IDS)

MS Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned (37 CFR 1.97(b)(3)).

Copies of the references on the PTO/SB/08 are not provided.

Application No.: 10/817,659 Docket No.: 291958157US4

The references cited. in the attached form PTO/SB/08 are not supplied because they were previously cited by or submitted to the Office in a prior application number 09/866,391, filed May 24, 2001 and relied upon in this application for an earlier filing date under 35 U.S.C. 120.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 50-0665, under Order No. 291958157US4.

Dated: 6/10

Respectfully submitted,

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PTO/SB/08a/b (08-03)
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291958157US4

Substitute for form 1449A/B/PTO

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INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known

Application Number 10/817,659

Filing Date April 2, 2004

First Named Inventor Gregory J. Wilson

Art Unit N/A

Examiner Name Not Yet Assigned

Attorney Docket Number

11

		Document Number	U.S. PATENT DOCUMENTS Publication Date Name of Patentee or		Pages, Columns, Lines, Where
Examiner Initials*	Cite No.1	Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Relevant Passages or Relevan Figures Appear
		US-09/679,928		Woodruff et al.	
		US-1,526,644	02-17-1925	Pinney	
		US-1,881,713	10-11-1932	Laukel	
		US-10/729,349		Klocke	
		US-10/729,357		Klocke	•
		US-10/817,659		Wilson et al.	
		US-2,256,274	09-16-1941	Boedecker et al.	
		US-2001-0024611	09-27-2001	Daniel Woodruff	
		US-2001-0032788	10-25-2001	Daniel Woodruff	
		US-2001-0043856	11-22-2001	Daniel Woodruff	
		US-2002-0008036	01-24-2002	Hui Wang	
		US-2002-0008037	01-24-2002		
		US-2002-0032499	03-14-2002		
		US-2002-0046952		Lyndon Graham	
		US-2002-0079215	06-27-2002		
		US-2002-0096508		Weaver et al.	
		US-2002-0125141	09-12-2002		
		US-2002-0139678		Gregory Wilson	
		US-2003-0038035		Gregory Wilson	
		US-2003-0062258	04-03-2003		
		US-2003-0070918		Kyle Hanson	
		US-2003-0127337		Kayle Hanson	
		US-2004-0031693	02-19-2004		
*		US-2004-0055877		Gregory Wilson	
		US-2004-0099533	05-27-2004	Gregory Wilson	
		US-3,309,263	03-14-1967	Grobe	
		US-3,616,284	10/1971	Bodmer et al.	
		US-3,664,933	05-23-1972	Clauss	
	<u> </u>	US-3,706,635	12-19-1972		
	<u> </u>	US-3,706,651	12-30-1970		
		US-3,716,462	02-13-1973		
		US-3,798,003	03-19-1974		
		US-3,878,066	04-15-1975		
	—	US-3,930,963		Polichette et al.	
	-	US-3,968,885		Hassan et al.	
	 	US-4,000,046	12-28-1976		
-		US-4,022,679	05-10-1977		
·	 	US-4,030,015	10-20-1975		
	 	US-4,046,105	09-06-1977		
		US-4,072,557	02-07-1978	Schiel	
	 	US-4,082,638	04-04-1978		

Date

Considered

	Under the Pap	erwork R	eduction Act of 1995, no persons	U.S. Patent a	PTO/SB/08a/b (08-03) pproved for use through 07/31/2006. OMB 0651-0031 nd Trademark Office; U.S. DEPARTMENT OF COMMERCE tion of information unless it contains a valid OMB control number.
Sut	Substitute for form 1449A/B/PTO				Complete if Known
	Suitate for form 14 to 25.7 .			Application Number	10/817,659
11	IFORMATION	1 DI	SCLOSURE	Filing Date	April 2, 2004
S	TATEMENT I	3Y /	APPLICANT	First Named Inventor	Gregory J. Wilson
				Art Unit	N/A
	(Use as many sheets as necessary)			Examiner Name	Not Yet Assigned
Sheet	2	of	11	Attorney Docket Number	291958157US4

	US-4,113,577	09-12-1978	Ross et al	
	US-4,134,802	01-16-1976		
	US-4,137,867	02-06-1979		
 	US-4,165,252	08-21-1979		
 	US-4,170,959	10-16-1979		
 	US-4,222,834		Bacon et al.	
	US-4,238,310		Eckler et al.	
	US-4,246,088		Murphy et al.	
	US-4,259,166	03-31-1981		
			KOUICHI SHIMAMURA	
	US-4,287,029		Grandia et al.	
	US-4,304,641		DAVID M. LOCH	
 	US-4,323,433			
ļ	US-4,341,629	07-27-1982		
	US-4,360,410		Fletcher et al.	
	US-4,378,283		MICHAEL SEYFFERT	
	US-4,384,930	05-24-1983		
 	US-4,391,694		BENGT W. RUNSTEN	
	US-4,422,915		Wielonski et al.	
	US-4,431,361	02-14-1984		
	US-4,437,943		ALEXANDER F. BECK	
	US-4,440,597	04-03-1984		
	US-4,443,117		Muramoto et al.	
	US-4,449,885		Hertel et al.	
	US-4,451,197	05/1984	Langé	
	US-4,463,503		ROBERT D. APPLEGATE	
	US-4,466,864		DUANE E. BACON	
L	US-4,469,566	09-04-1984		
	US-4,475,823	10-09-1984		
	US-4,480,028	10-30-1984	Kato et al.	
	US-4,495,153		MINORU MIDORIKAWA	
	US-4,495,453		HAJIMU INABA	
	US-4,500,394		JOHN S. RIZZO	
	US-4,529,480	07-16-1985		
	US-4,541,895	09-17-1985		
	US-4,566,847		TAKASHI MAEDA	
	US-4,576,685		Goffredo et al.	
	US-4,576,689	03-18-1986	ALMAXUD M, MAKKAEV	
	US-4,585,539	04-29-1986		
	US-4,604,177		OLIVO G. SIVILOTTI	
	US-4,604,178		DALE R. FIEGENER	
	US-4,634,503	01-06-1987	DANIEL NOGAVICH	
	US-4,639,028	01/1987	Olson .	
	US-4,670,126	06/1987	Messer et al.	
	US-4,685,414	08-11-1987	DiRico	
	US-4,687,552	08-18-1987	Early et al.	

Examiner	Date
Signature	Considered

Substit	ute for form 1449A/E	3/PTO		Complete if Known		
				Application Number	10/817,659	
INF	ORMATIC	ON DISC	CLOSURE	Filing Date	April 2, 2004	
ST	ATEMEN1	BY AF	PLICANT	First Named Inventor	Gregory J. Wilson	
				Art Unit	N/A	
	(Use as many	sheets as ne	cessary)	Examiner Name	Not Yet Assigned	
Sheet	3	of	11	Attorney Docket Number	291958157US4	

r		122		
	US-4,693,017		Oehler et al.	
	US-4,696,729	09-29-1987		
	US-4,715,934	12-29-1987		
	US-4,741,624	05-03-1988		
	US-4,760,671		WILLIAM R. WARD	
	US-4,761,214	08-02-1988	EDMUND R. HINMAN	
	US-4,770,590	09/1988	Hugues et al.	
	US-4,781,800		LEE M. GOLDMAN	
	US-4,800,818		Kawaguchi et al.	
	US-4,828,654		RONALD G. REED	
	US-4,849,054	07-18-1989		
	US-4,858,539	08-22-1989		
	US-4,864,239	09-05-1989	Casarcia et al.	
	US-4,868,992	09-26-1989	Crafts et al.	
	US-4,898,647	02/1990	Luce et al.	
	US-4,906,341		KOJI YAMAKAWA	
	US-4,913,035		Vohringer et al.	
	US-4,924,890	05-15-1990		
	US-4,944,650	07/1990	Matsumoto	
	US-4,951,601		Maydan et al.	
	US-4,959,278		HIDENORI SHIMAUCH	
	US-4,962,726		Matsushita et al.	
	US-4,979,464		Kunze-Concewitz et al.	
	US-5,000,827		VIRGIL E. SCHUSTER	
	US-5,024,746		Stierman et al.	
	US-5,026,239	06-25-1991		
	US-5,048,589	09-17-1991	Cook et al.	
	US-5,054,988	10-08-1991	Shiraiwa	
	US-5,055,036	10-08-1991	Asano et al.	
	ÚS-5,061,144	10-29-1991	MASAMI AKIMOTO	
	US-5,069,548	12-03-1991	Boehnlein	
	US-5,078,852	01-07-1992	IAN Y.K. YEE	
	US-5,083,364	01-28-1992	Olbrich et al.	
	US-5,096,550	03-17-1992	STEVEN T. MAYER	
	US-5,110,248	05-05-1992	Asano et al.	
	US-5,115,430		ELLEN L. HAHNE	
	US-5,125,784	06-30-1992	Asano	
	US-5,128,912	07/1992	Hug et al.	
	US-5,146,136		TOSHIO OGURA	
	US-5,151,168		TERRY L. GILTON	
	US-5,155,336		Gronet et al.	
	US-5,156,174		RAYMON F. THOMPSON	
	US-5,156,730		ANILKUMAR C. BHATT	
	US-5,168,886		Thompson et al.	
	US-5,168,887	12-08-1992	RAYMON F. THOMPSON	

Examiner	Date	
Signature	Considered	

Sut	ostitute for form 1449A/B/PT	O		Complete if Known		
000				Application Number	10/817,659	
11	NFORMATION	1 DI	SCLOSURE	Filing Date	April 2, 2004	
S	TATEMENT B	3Y /	APPLICANT	First Named Inventor	Gregory J. Wilson	
				Art Unit	N/A	
	(Use as many sh	eets as	necessary)	Examiner Name	Not Yet Assigned	
Sheet	4	of	11	Attorney Docket Number	291958157US4	

	US-5,168,887	12-08-1002	Thompson et al.	
	US-5,169,408		Biggerstaff et al.	
-	US-5,172,803	12-22-1992		
 	US-5,174,045		Thompson et al.	
	US-5,174,045	01/1993	Skrobak	
	US-5,178,639	01-12-1993		
<u> </u>			Salaya et al.	
	US-5,180,273			
-	US-5,183,377		Becker et al.	
	US-5,186,594		Toshima et al.	
	US-5,209,817		UMAR M. AHMAD	
	US-5,217,586		MADHAV DATTA	
ļ	US-5,222,310		RAYMON F. THOMPSON	
	US-5,227,041		BRUCE N. BROGDEN	
	US-5,228,232		RODNEY MILES	
	US-5,228,966		SATOSHI MURATA	
	US-5,230,371	07-27-1993		
	US-5,232,511	08-03-1993		`
	US-5,235,995		Bergman et al.	
	US-5,238,500	08-24-1993		
	US-5,252,137		Tateyama et al.	
	US-5,252,807	10-12-1993		
	US-5,256,262		Blomsterberg	
	US-5,256,274	10-26-1993	JAIME PORIS	
	US-5,271,953	12-21-1993	Litteral	
	US-5,271,972	12-21-1993	Kwok et al.	
	US-5,301,700	04-12-1994	Kamikawa et al.	
	US-5,302,464	04-12-1994	TAKUJI NOMURA	
	US-5,306,895	04-26-1994	Ushikoshi et al.	
	US-5,314,294	09-24-1994	TAKAO TANIGUCHI	
	US-5,316,642	05-31-1994	DAVID J. YOUNG	
	US-5,326,455	07/1994	Kubo et al.	
	US-5,330,604	07-19-1994	Allum et al.	
	US-5,332,271	07-26-1994		
	US-5,332,445	07-26-1994		
	US-5,340,456	08-23-1994		
	US-5,344,491		MARIKO KATOU	
	US-5,348,620		Hermans et al.	
	US-5,364,504		Smurkoski et al.	
	US-5,366,785	11-22-1994		
	US-5,366,786		Connor et al.	
	US-5,368,711		JAIME PORIS	
	US-5,372,848		KIM J. BLACKWELL	
	US-5,376,176		ATSUSHI KURIYAMA	
	US-5,377,708		ERIC J. BERGMAN	
	US-5,377,708		Bergman et al.	
	1000,0,	10.00	I = 2-9	

Examiner	Date
Signature	Considered

Sut	estitute for form 1449A/B/PT	ro		Complete if Known		
				Application Number	10/817,659	
11	NFORMATION	N DIS	SCLOSURE	Filing Date	April 2, 2004	
S	TATEMENT I	BY A	PPLICANT	First Named Inventor	Gregory J. Wilson	
				Art Unit	N/A	
	(Use as many sh	eets as	necessary)	Examiner Name	Not Yet Assigned	
Sheet	5	of	11	Attorney Docket Number	291958157US4	

110 = 000 0 15		
US-5,388,945	02-14-1995	
US-5,391,285	02-21-1995	WILLIAM H. LYTLE
US-5,391,517	02-21-1995	Gelatos et al.
US-5,405,518	04-11-1995	Hsieh et al.
US-5,411,076	05-02-1995	Matsunaga et al.
US-5,421,987	06-06-1995	Tzanavaras et al.
US-5,427,674	06-27-1995	Langenskiold et al.
US-5,429,686	07-04-1995	
US-5,429,733	07-04-1995	HIROFUMI ISHIDA
 US-5,431,803	07-11-1995	DiFranco et al.
US-5,437,777		SHUJI KISHI
US-5,441,629	08-15-1995	
US-5,442,416		Tateyama et al.
US-5,443,707	08-22-1995	
US-5,445,484	08-29-1995	Kato et al.
US-5,447,615	09-05-1995	
US-5,454,405	10-03-1995	Hawes
US-5,460,478	10-24-1995	Akimoto et al.
US-5,464,313	11-07-1995	
US-5,472,502	12-05-1995	WILLIAM T. BATCHELDER
US-5,489,341	02-06-1996	Bergman et al.
US-5,500,081	03-19-1996	
US-5,501,768	03-26-1996	Hermans et al.
US-5,508,095	04-16-1996	Allum et al.
US-5,512,319	04-30-1996	Cook et al.
US-5,514,258	05-07-1996	Brinket et al.
US-5,516,412	02-06-1996	Andricacos et al.
US-5,522,975	06/1996	Andricacos et al.
US-5,527,390	06-18-1996	Ono et al.
US-5,544,421	08-13-1996	Thompson et al.
US-5,549,808		MUKTA S. FAROOQ
US-5,567,267		Kazama et al.
US-5,571,325		TSUTOMU UEYAMA
US-5,571,325		Ueyama et al.
US-5,575,611	11-19-1996	Thompson et al.
US-5,584,310		ERIC J. BERGMAN
US-5,584,971	12-17-1996	
US-5,593,545		Rugowski et al.
US-5,597,460	01-28-1997	H. VINCENT REYNOLDS
US-5,597,836		Hackler et al.
US-5,600,532		Michiya et al.
US-5,609,239	03-11-1997	Schlecker
US-5,620,581	04-15-1997	
US-5,639,206	06-17-1997	
US-5,639,316	06-17-1997	CYRIL CABRAL

Examiner	Date	
Signature	Considered	

Subs	Substitute for form 1449A/B/PTO			Complete if Known		
Substitute for form 1440/Vol. 10				Application Number	10/817,659	
IN	IFORMATIC	N DISC	LOSURE	Filing Date	April 2, 2004	
STATEMENT BY APPLICANT				First Named Inventor	Gregory J. Wilson	
	.,			Art Unit	N/A	
	(Use as many sheets as necessary)			Examiner Name	Not Yet Assigned	
Sheet	6	of	11	Attorney Docket Number	291958157US4	

US-5,641,613	06-24-1997	Roff et al
US-5,650,082	07-22-1997	
	07-22-1997	
US-5,651,823 US-5,658,387		Reardon et al.
	08-26-1997	
US-5,660,472		Thompson et al.
US-5,660,517	08/1997	
US-5,662,788	09-02-1997	<u> </u>
US-5,664,337	09-09-1997	
US-5,670,034		KENNETH J. LOWERY
US-5,676,337	10/1997	Giras et al.
US-5,677,118	10-14-1997	
US-5,678,320		Thompson et al.
US-5,678,320	10/1997	Thompson et al.
US-5,681,392	10-28-1997	
US-5,683,564	11-04-1997	
US-5,684,654		Searle et al.
US-5,700,127		JUNJI HARADA
US-5,700,127		Harada et al.
US-5,711,646	01/1998	Ueda et al.
US-5,723,028		JAIME PORIS
US-5,731,678	03-24-1998	
US-5,744,019	04-28-1998	
US-5,746,565	05/1998	Tepolt
US-5,747,098	05-05-1998	
US-5,755,948		Lazaro et al.
US-5,759,006	06/1998	Miyamoto et al.
US-5,762,751		MARTIN C. BLECK
US-5,765,444	06-16-1998	PAUL BACCHI
US-5,765,889	06/1998	Nam et al.
US-5,776,327	07-07-1998	
US-5,785,826		ALEX GREENSPAN
US-5,788,829		Joshi et al.
US-5,802,856		Schaper et al.
US-5,829,791		Kotsubo et al.
US-5,843,296	12-01-1998	
US-5,871,626		DOUGLAS E. CRAFTS
US-5,871,805		JEROME LEMELSON
US-5,882,498		VALERY DUBIN
US-5,892,207		Kawamura et al.
US-5,904,827	05-18-1999	
US-5,908,543	06-01-1999	TAKASHI MATSUNAMI
US-5,925,227	07/1999	Kobayashi et al.
US-5,932,077		H. VINCENT REYNOLDS
US-5,937,142		Moslehi et al.
US-5,957,836	09-28-1999	Johnson

Examiner	Date
Signature	Considered

Substitute for form 1449A/B/PTO				Complete if Known		
Casastate for form 1440/05/17 FC				Application Number	10/817,659	
	NFORMATION		SCLOSURE	Filing Date	April 2, 2004	
5	STATEMENT BY APPLICANT			First Named Inventor	Gregory J. Wilson	
				Art Unit	N/A	
	(Use as many sheets as necessary)			Examiner Name	Not Yet Assigned	
Sheet	7	of	11	Attorney Docket Number	291958157US4	

	US-5,980,706		MARTIN BLECK	
	US-5,985,126		MARTIN C. BLECK	
	US-5,989,406		CHARLES P. BEETZ	
	US-5,998,123	12-07-1999	Tanaka et al.	
	US-6,001,235	12-14-1999	Arken et al.	
i i i	US-6,004,828	12-21-1999	KYLE M. HANSON	
	US-6,017,820	01-25-2000		
	US-6,027,631	02-22-2000	ELIOT K. BROADBENT	
	US-6,053,687		THOMAS I. KIRKPATRICK	
	US-6,072,160	06-06-2000		
	US-6,072,163	06-06-2000	Armstrong et al.	
	US-6,074,544	06-13-2000	JONATHAN D. REID	
	US-6,080,288	06-27-2000	Schwartz et al.	
	US-6,080,291	06-27-2000	Woodruff et al.	
	US-6,080,691	06-27-2000	Lindsay et al.	
	US-6,086,680		Foster et al.	
	US-6,090,260	07-18-2000	SATOSHI INOUE	
	US-6,091,498	07-18-2000	KYLE HANSON	
	US-6,099,702	08-08-2000	JONATHAN D. REID	
	US-6,099,712		THOMAS L. RITZDORF	
	US-6,103,085	08-15-2000		
	US-6,107,192		Subrahmanyan et al.	
	US-6,108,937		Raaijmakers	
	US-6,110,011		SASSON SOMEKH	
	US-6,110,346		JONATHAN D. REID	
	US-6,130,415	10-10-2000		
	US-6,136,163		ROBIN CHEUNG	
	US-6,139,703		Hanson et al.	
	US-6,139,712		EVAN E. PATTON	
	US-6,140,234	10-31-2000		
	US-6,143,147	11-07-2000		
	US-6,143,155		JOHN A. ADAMS	
	US-6,156,167		EVAN E. PATTON	
	US-6,157,106	12-05-2000		
	US-6,159,354		ROBERT J. CONTOLINI	
	US-6,162,344		JONATHAN D. REID	
	US-6,168,695		DANIEL J. WOODRUFF	
	US-6,174,425		CINDY R. SIMPSON	·
	US-6,174,796		Takagi et al.	
	US-6,179,983		JONATHAN DAVID REID	
	US-6,179,983		JONATHAN DAVID REID	
	US-6,184,068		Ohtani et al.	
	US-6,193,859		ROBERT J. CONTOLINI	
	US-6,218,097	04-17-2001		
	US-6,221,230	01-01-2001	HIROMITSU TAKEUCHI	

Examiner		Date	
Signature	· · · · · · · · · · · · · · · · · · ·	Considered	

Sub	Substitute for form 1449A/B/PTO			Complete if Known		
3334,513 (3.1.7.1.1.7.3.1.3.1.7				Application Number	10/817,659	
11	NFORMATION	I DI	SCLOSURE	Filing Date	April 2, 2004	
S	STATEMENT BY APPLICANT			First Named Inventor	Gregory J. Wilson	
				Art Unit	N/A	
	(Use as many sheets as necessary)			Examiner Name	Not Yet Assigned	
Sheet	8	of	11	Attorney Docket Number	291958157US4	

1110 0 000 000	100.00.000	Taxxiiii	
 US-6,228,232		DANIEL J WOODRUFF	
US-6,234,738		KAZUO KIMATA	
US-6,251,238		Kaufman et al.	
ÚS-6,251,528	06-26-2001		
US-6,254,742	07-03-2001	Hanson et al.	
 US-6,258,220		YEZDI DORDI	
US-6,261,433		UZIEL LANDAU	*
 US-6,270,647		LYNDON W. GRAHAM	
US-6,277,263		LINLIN CHEN	
US-6,278,089		Young et al.	
US-6,280,183		Mayur et al.	
US-6,280,582		Woodruff et al.	
US-6,280,583	08-28-2001	Woodruff et al.	
US-6,297,154	10-02-2001	Gross et al.	
US-6,303,010		Woodruff et al.	
US-6,309,520		Woodruff et al.	
US-6,309,524		Woodruff et al.	
US-6,318,951		WAYNE J. SCHMIDT	
US-6,318,951	11/2001	Schmidt et al.	
US-6,322,112		Franklin Duncan	
US-6,322,677		Daniel Woodruff	
US-6,342,137	01-29-2002	Daniel Woodruff	
US-6,365,729		Sanjay Tyagi	
US-6,391,166	05-21-2002	HUI WANG	
US-6,402,923		Steven Mayer	
US-6,409,892		Woodruff et al.	
US-6,428,660	08-06-2002	Woodruff et al.	
US-6,428,662	08-06-2002	Woodruff et al.	
US-6,444,101	03-14-2002	JOSEPH STEVENS	
US-6,471,913		Weaver et al.	
US-6,481,956	11-19-2002	CHRISTOPHER A. HOFMEISTER	
US-6,491,806		Valery Dubin	
US-6,497,801		DANIEL J WOODRUFF	
US-6,562,421	11-07-2002		
US-6,565,729	01-24-2002		
US-6,569,297		Gregory Wilson	
US-6,599,412		Lyndon Graham	
US-6,623,609		Randy Harris	
US-6,632,334		Timothy Anderson	
US-6,660,137	01-24-2002	Gregory Wilson	
US-6,699,373		Daniel Woodruff	
US-6,709,562		PANAYOTIS C. ANDRICACOS	
US-6,755,954	06-29-2004	Mayer et al.	
US-60/129,055		McHugh	
US-60/143,769		McHugh ·	

Examiner	Date
Signature	Considered

Substitute for form 1449A/B/PTO				Complete if Known		
				Application Number	10/817,659	
11	NFORMATION	N DI	SCLOSURE	Filing Date	April 2, 2004	
S	STATEMENT BY APPLICANT			First Named Inventor	Gregory J. Wilson	
				Art Unit	N/A	
	(Use as many sheets as necessary)			Examiner Name	Not Yet Assigned	
Sheet	9	of	11	Attorney Docket Number	291958157US4	

US-60/182,160	McHugh et al.	
US-60/206,663	Wilson et al.	
US-60/294,690	Gibbons et al.	
US-60/316,597	Hanson	
US-60/607,046	Klocke	
US-60/607,460	Klocke	

FOREIGN PATENT DOCUMENTS								
C	0:40	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Pages, Columns, Lin				
Examiner Initials*	Cite No. ¹	Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)		Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T⁵		
		CA-873651	06/1971	Cronin, DC				
		DE-195 25 666	10-02-1996	Huebsch et al.				
		DE-41 14 427	11-05-1992	Moritz, Heiko				
		EP-0 140 404 A1	08-16-1984	The Proctor & Gamble Co.				
		EP-0 257 670	03-02-1988	Estham et al.				
		EP-0 290 210	11-09-1988	Oki Electric Industry Co.				
		EP-0 677 612 A3	10-18-1985	Kimberly-Clark Corp				
		EP-0 881 673 A2	05-08-1998	Intl Business Machines Corp				
		EP-0 982 771 A1	08-17-1999	Lucent Technologies, Inc.				
		EP-0047132 B1	07-03-1985	Heraeus Quarzschmelze				
		EP-0290210	11-09-1988	Oki Electric Industry Co.				
		EP-0452939 B1	11-02-2000	Applied Materials, Inc.				
		EP-0544311 B1	05-15-1996	Dainippon Screen Mfg. Co. Ltd				
		EP-0582019 B1	10-18-1995	Intl Business Machines				
		EP-1 069 213 A2	07-11-2000	Applied Materials Inc.				
		GB-2 254 288 A	03-24-1992					
		GB-2 279 372A	06-23-1994	Kimberly-Clark Corp.				
		GB-2217107A	03-23-1989	Canon Kabushiki Kaisha				
		JP-10-083960	03-31-1998	Takashi				
		JP-1048442	02-22-1989	Texas Instru Japan				
		JP-4144150	05-18-1992	Oki Electric Ind Co Ltd				
		JP-5146984	06-15-1993	Murata Mach Ltd.	()			
		JP-5211224	08-20-1993	Texan Instr Japan				
		WO-00/02675	01-02-2000	Semitool, Inc.				
		WO-00/02808 A1	01-20-2000	Semitool, Inc.				
		WO-00/03072	01-20-2000	Woodruff et al.				
		WO-00/32835	06-08-2000	Dordi et al.				
		WO-00/61498	10-19-2000	Wilson et al.				
		WO-00/61837	10-19-2000	Wilson et al.				
		WO-01/46910	06-28-2001	Electronic Arts Inc.				
		WO-01/90434		Semitool, Inc.				
		WO-01/91163		Semitool, Inc.				
		WO-02/02808	01-20-2000	Semitool, Inc.				

Examiner	Date	
Signature	Considered	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO				Complete if Known		
				Application Number	10/817,659	
١N	IFORMATIO	N DIS	CLOSURE	Filing Date	April 2, 2004	
S	TATEMENT	BY A	PPLICANT	First Named Inventor	Gregory J. Wilson	
				Art Unit	N/A	
	(Use as many s	heets as r	necessary)	Examiner Name	Not Yet Assigned	
Sheet	10	of	11	Attorney Docket Number	291958157US4	

WO-02/045476	06-13-2002	Semitool, Inc.	
WO-02/097165	12-05-2002	Semitool, Inc.	
WO-02/099165	12-12-2002	Semitool, Inc.	
WO-02/17203	02-28-2002	Sabre Inc.	
WO-02/99165	12-12-2002	Semitool, Inc.	
WO-03/18874	09-03-2002	Semitool, Inc.	
WO-90/00476	01-25-1990	Tuckerman	
WO-91/04213	04-04-1991	Wong et al.	
WO-95/06326	03-02-1995	Semitool, Inc.	
WO-95/20064	07-27-1995	Berg	
WO-99/16936	04-08-1996	Semitool, Inc.	
WO-99/25904	05-27-1999	Reid et al.	
WO-99/25905	05-27-1999	Patton et al.	
WO-99/40615	08-12-1999	Ritzdorf et al.	
WO-99/41434	08-19-1999	ACM Research, Inc.	
WO-99/45745	09-10-1999	Armstrong et al.	
WO-WO 99/16936	04-08-1996	Semitool, Inc.	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those patent(s) or publication(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(e)) because that application was filed after June 30, 2003. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

		NON PATENT LITERATURE DOCUMENTS		
Examiner Initials	Cite No. ¹	. I manazino inilitaal corial cympociilm catalon otc'i nato panelci vollime-icclie nilmperici pilpiicper city		
		LEE, TIEN-YU TOM, "Application of a CFD Tool in Designing a Fountain Plating Cell for Uniform Bump Plating of Semiconductor Wafers," IEE Transactions on Components, Packaging, and Manufacturing Technology (February 1996), Vol. 19, No. 1, IEEE		
		PATENT ABSTRACT OF JAPAN, "Plating Method" Publication No. 57171690, Publication Date: October 22, 1982		
		PATENT ABSTRACT OF JAPAN, "Partial Plating Device," Publication No. 01234590, Publication Date: Sept 19, 1989		
		CONTOLINI ET AL., "Copper Electroplating Process for Sub-Half-Micron ULSI Structures," VMIC Conference 1995 ISMIC - 04/95/0322, pgs 322-328, June 17-29, 1995		
		DEVARAJ et al., "Pulsed Electrodeposition of Copper," Plating & Surface Finishing, Pgs 72-78, August 1992		
	CG	DUBIN, "Copper Plating Techniques for ULSI Metallization," Advanced MicroDevices		
	СН	DUBIN, V.M., "Electrochemical Deposition of Copper for On-Chip Interconnects," Advanced MicroDevices		
		GAUVIN et al., "The Effect of Chloride lons on Copper Deposition," J. of Electrochemical Society, Vol 99, pgs 71-75, February 1952		
		OSSRO, N.M., "An Overview of Pulse Plating," Plating and Surface Finishing, March 1986		

Examiner	Date
Signature	Considered

Substitute for form 1449A/B/PTO				Complete if Known		
				Application Number	10/817,659	
11	IFORMATION		SCLOSURE	Filing Date	April 2, 2004	
S	TATEMENT B	3Y /	APPLICANT	First Named Inventor	Gregory J. Wilson	
				Art Unit	N/A	
	(Use as many sh	eets as	necessary)	Examiner Name	Not Yet Assigned	
Sheet	11	of	11	Attorney Docket Number	291958157US4	

PASSAL, F., "Copper Plating During the Last Fifty Years," Plating, pgs 628-638, June 1959
SINGER, P., "Copper Goes Mainstream: Low k to Follow," Semiconductor International, pgs
67-70, November 1997
LOWENHEIM, FREDERICK A., "Electroplaiting," January 1979, 12 pgs, McGraw-Hill Book
Company, USA
PCT International Search Report for PCT/US02/17840, Applicant: Semitool, Inc., March 2003,
5 pages

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiner	Date	
Signature	Considered	

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.